

# 2019 Biophysics Symposium Schedule

*Location: Chemistry Room 1210*

8:00 – 9:15 am *Breakfast – Poster Session A (Chemistry Atrium)*

9:20 – 9:30 am **Opening Remarks**  
Charles L. Brooks III, PhD  
Professor of Chemistry, Biophysics  
Director, Biophysics Program

## *Session 1: Biophysics Showcase*

9:35 – 9:55 am **Development of polymer-lipid nanodiscs for structural studies of membrane proteins**  
Thirupathi Ravula, PhD  
Post-doctoral Fellow, Ramamoorthy Lab

9:55 – 10:15 am **Membrane phases and protein organization in and out of the cell**  
Sarah Shelby, PhD  
Post-doctoral Fellow, Veatch Lab

10:15 – 10:35 am **Evolving with promiscuous substrates in the small multidrug resistance family**  
Chris MacDonald  
PhD Candidate, Stockbridge/Ramamoorthy Lab

10:35 – 10:55 am *Coffee Break*

10:55 – 11:15 am **Understanding the mitotic cycle using artificial cells: How does energy consumption affect the mitotic cycle behaviors?**  
Shiyuan Wang  
PhD Candidate, Yang Lab

11:15 – 11:35 am **Network level resonance in sleep-dependent memory consolidation**  
Quinton Skilling  
PhD Candidate, Zochowski Lab

11:35 – 12:00 pm **Probing dissipating time scales in biological active matter using multi-scale irreversibility**  
Jordan Horowitz, PhD  
Professor of Biophysics

12:00 – 1:20 pm *Lunch – Poster Session B (Atrium)*

## *Session 2: Advances in Protein Design and Engineering*

1:30 – 1:50 pm **Towards computational protein design with multisite  $\lambda$  dynamics**  
Ryan Hayes, PhD  
Post-doctoral Fellow, Brooks Lab

1:50 – 2:10 pm **Fragment-based approach to block Histone H3 acetyl-lysine recognition by GAS41 YEATS domain**

Brian Linhares  
PhD Candidate, Cierpicki Lab

- 2:10 – 2:45 pm **Exploring protein design**  
Yang Zhang, PhD  
Professor of Computational Medicine and Bioinformatics
- 2:45 – 3:20 pm **Re-writing the rules for protein-protein interaction inhibitors**  
Anna Mapp, PhD  
Professor of Chemistry  
Director, Program in Chemical Biology
- 3:20 – 3:40 pm *Coffee Break*
- 3:40 – 3:45 pm *Keynote Speaker Introduction*
- 3:45 – 4:50 pm **Keynote: Navigating the sequence space of Bcl-2 binding peptides**  
Amy Keating, PhD  
Professor of Biology and Bioengineering  
Massachusetts Institute of Technology
- 4:50 – 5:00 pm **Closing Remarks, Poster Awards**